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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,442

07/18/2006

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EXAMINER

NGUYEN, HOANG V

ART UNIT

PAPER NUMBER

2821

MAIL DATE

DELIVERY MODE

10/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/584,442

**Applicant(s)**

PROS ET AL.

**Examiner**

Hoang V. Nguyen

**Art Unit**

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-20 is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____  |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :6/21/06;9/18/06;12/27/06;7/23/07;8/15/07;10/4/07.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Niu et al (US 5,929,825).

Regarding claim 1, Niu (Figures 4 and 5, col 3 lines 7-42) discloses an antenna for use in a mobile communication device comprising an antenna substrate 202 with a front side and a back side; a first spiral conductor 203 located on the front side of the antenna substrate; and a second spiral conductor 205 located on the back side of the antenna substrate, wherein the first spiral conductor and the second spiral conductor are electrically connected.

Regarding claim 2, as applied to claim 1, Figures 4 and 5 of Niu shows that the first spiral conductor and the second spiral conductor are electrically connected through a hole in the antenna substrate.

Regarding claim 3, as applied to claim 1, Figures 4 and 5 of Niu shows that the first spiral conductor is connected to a feeding port used to form an electrical connection between the antenna and a mobile communication device.

Regarding claim 4, as applied to claim 1, Figures 4 and 5 of Niu shows that the first spiral conductor and second spiral conductor have the same shape.

Regarding claim 5, Niu (abstract) teaches a housing for use with a mobile communication device containing the antenna of claim 1.

***Allowable Subject Matter***

4. Claims 6-20 are allowed.

5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 6, Niu discloses an antenna for use in a mobile communication device comprising an antenna substrate with a base, a top, a front side and a back side; a first conductor located on the front side of the antenna substrate, and a second conductor located on the second side of the antenna substrate. Niu, however, fails to further teach that the first conductor comprising a dual branched antenna with a space-filling or grid dimension branch and a linear branch; and the second conductor comprising a conducting plate.

Claims 7-19 are allowed for depending on claim 6.

Regarding claim 20, Niu discloses a multiband monopole antenna for external use in a mobile communication device comprising an antenna substrate with a base, a top, a front side and a back side; a first conductor located on the front side of the antenna substrate, and a second conductor located on the second side of the antenna substrate, wherein the first conductor and the second conductor are electrically connected at the top of the antenna substrate through holes in the antenna substrate. Niu, however, fails to further teach that the first conductor comprising a dual branched antenna with a space-filling or grid dimension branch for receiving frequencies in the GSM900 band and a linear branch for receiving frequencies in the GSM1800 band; the

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second conductor comprising a conducting plate that is positioned behind the space-filling or grid dimension branch of the dual branched antenna.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 5,990,849 discloses an antenna comprising first and second spiral antenna elements disposed on first and second side of a dielectric substrate.
- US 5,608,417 discloses an antenna comprising first and second spiral antenna elements disposed on first and second side of a dielectric substrate.
- US 4,578,654 discloses an antenna comprising first and second spiral antenna elements disposed on first and second side of a dielectric substrate.

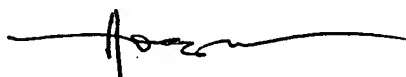
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang V. Nguyen whose telephone number is (571) 272-1825. The examiner can normally be reached on Mondays-Fridays from 8:00 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hvn  
10/16/07



HOANG V. NGUYEN  
PRIMARY EXAMINER